

Clearing the Air Around Influenza

Transmission or activation?



TOM JEFFERSON AND CARL HENEGHAN

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This post is an update and summary of several TTE posts including our Transmission Riddle 3

The SARS-CoV-2 transmission riddle - Part 3 and Architecture of Isolation 9

TOM JEFFERSON AND CARL HENEGHAN · JANUARY 30, 2024

**The SARS-CoV-2
transmission
riddle - Part 3
and Architecture
of isolation 9**
(revised January 2024)

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This is the third post of a re-run of our Transmission Riddle series, which was originally posted in 2022. Each post has been updated and reworked with what new evidence we could find. The serial numbers of the original posts may not correspond as we expand, merge, edit and add, like a concertina. Because of content transmission, riddles are looked at i...

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Sadly, good evidence does not support the concept of one-to-one transmission of respiratory viruses. Things are never as easy as charlatans would like.

Here is a selection of stories and experiences that cast doubt on the transmission or replication of competent viruses.

First, the recent one. The [tale](#) of the Argentinian fishermen: 61 crew members who had been quarantined for two weeks before sailing and tested negative for SARS-CoV-2 set sail for the Antarctic fishing grounds in their trawler. After about 35 days at sea with no contact (other than with the fish), they started exhibiting signs and symptoms

of Covid and were quickly returned to base in Tierra del Fuego. All but a few were positive, and two were hospitalised.

Attentive readers of the first Riddle series will recall our mentioning similar episodes, and indeed, the two series are called “Riddles” and “Isolation”.

Nonsensical events such as the trawler story have been known for centuries. The name “influenza” comes from the Italian “Influenza degli astri” (influence of the planets). Our ancestors were as bewildered as much as we are today. It comes and goes without rhyme or reason; surely, the planets must be causing all this mayhem!

We offer this narrative by Sir Christopher Andrewes from his book “The Common Cold” and the chapter “Transmission vs Activation”. Andrewes was no empty vessel; he was part of the trio who isolated the first human influenza virus.

“It is well-established that polar explorers and others cut off from contact with their fellow men for some time are abnormally susceptible to catching colds when they once more rejoin civilization. This matter will be discussed more fully in Chapter 15. Could we possibly get hold of such returning hyper-susceptible explorers and carry out our contact experiments on them? Alas, we could not. Returning explorers show a not unnatural interest in rejoining their families. We planned therefore to keep the whole thing under our own control by marooning our own party of explorers on our own desert island.

We learnt through Dr Fraser Darling of a suitable island, Eilean nan Ron, lying one and half miles off the little port of Skerry on the north coast of Sutherland. It was just over a mile long and less than a mile wide surrounded by fairly steep cliffs but with one good landing place. The island had a number of well-built houses on it but had been abandoned by the inhabitants for economic reasons twelve years earlier. It belonged to the Duke of Sutherland who kindly lent it to us. A few of the houses were readily made habitable and early in July 1950 a party of twelve volunteers was, not unwillingly, marooned on the island. Most of them were students from the University of Aberdeen; in charge was an ex-superintendent of police. They were to be there for three months, their summer vacation, the longest period for which we could readily obtain volunteers. They took with them all the stores and equipment they needed for their stay; and

they also had a small radio transmitter and receiver with which they maintained daily contact with the mainland.

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One man had a cold on arrival, July 8th; another case occurred on July 9th and three more on July 11th. There were no more until the isolation ended on September 19th. On that day a colleague and I landed and made contact with some of the Party to see whether any stranger, even without a cold, could introduce infection.

Nothing having happened, another of our team arrived with five others; all had just been inoculated in Aberdeen with one of our “pedigree” colds, that is one which had been studied for some while at Salisbury [MRC Common Cold Unit]. Meanwhile the island had been divided into three, each third inhabited by a party of four islanders, who kept apart from the other two parties. Each group was exposed under different conditions to the newly arrived party, each of whom had either developed a cold already, or did so very shortly after landing. The 'colds' had arrived late in the day, but as early colds are probably the most infectious we carried out the experiment forthwith and far into the night. It was a fine night and a magnificent display of the Aurora-Borealis made the whole thing most romantic. The six invaders with colds attempted to infect the islanders in one of three ways. They occupied a room in one of the houses for three hours in the absence of the four 'natives' (party A). To quote the report: “During their occupation they were liberal in the way they disseminated nasal discharge on playing cards, books, cutlery and handles of cups, letters, chairs, door-handles and tables”. They then left the room, which was aired for half an-hour before party A entered. The invaders then occupied a room with party B, being separated from them by a blanket stretched across the room but not quite reaching floor or ceiling. This arrangement was intended, and in fact shown by appropriate tests, to permit droplet nuclei to pass to the

opposite half of the room while stopping coarse particles. Party C lived and ate with the people with the colds for three days, allowing maximum exposure. To our intense surprise and disappointment, no colds developed in any of the groups. Four more people with colds arrived a few days later and were exposed to party A under conditions of 'maximum exposure'. Again no colds developed.

We then learnt, through our radio, of a crofter on the main land who had a cold, though not a very early, streaming one. He was exposed to Party B, talking round a fire for two periods of two hours, and this time transfer was successful, three of four of the Bs developing colds within a few days.

In reviewing the rest we inclined to think at the time that our 'pedigree' cold strain was for some reason less effective than a naturally occurring one. In the light of later work on the multiplicity of strains of cold-viruses it seems far more likely that the islanders were resistant as a result of the little outbreak of colds a few days after their isolation began; and that by bad luck this was due to a virus of the same type as the pedigree virus used in the later test.

Though this laborious experiment failed in its main objective, it gave us some useful ideas for future work.”

The year was 1950, and Sir Christopher blamed immunity for the failure of his elaborate isolation experiment and subsequent exposure. The “pedigree” was almost certainly rhinovirus, although its identification came later. Other transmission experiments also yielded equivocal results.

Until the 1930s, apparent outbreaks of influenza-like illness in isolation settings were recorded haphazardly.

We offer another well-documented historical example reported in the [Journal of Hygiene](#) (London). This one, too, is from a chilly environment: Antarctica.

An outbreak of common colds at an Antarctic base after seventeen weeks of complete isolation

By T. R. ALLEN

Medical Officer, British Antarctic Survey

AND A. F. BRADBURNE, E. J. STOTT, C. S. GOODWIN

AND D. A. J. TYRRELL

Clinical Research Centre, Harrow, England

(Received 28 February 1973)

SUMMARY

Six of 12 men wintering at an isolated Antarctic base sequentially developed symptoms and signs of a common cold after 17 weeks of complete isolation. Examination of specimens taken from the men in relation to the outbreak has not revealed a causative agent.

From March 18, 1969, to December, 12 men wintered at the Adelaide Winter base when the first aircraft arrived. Six of the 12 sequentially developed symptoms and signs of a common cold after 17 weeks of complete isolation.

No specimen, both swabs, cultures or sera, revealed exposure to a causative agent. The outbreak was studied in collaboration with Andrewes's MRC Common Cold Unit, which ran an extensive range of tests looking for the usual agents, including coronaviridae. The recording was carried out under radio supervision by a trained physician at the base and included the recording of symptoms and meteorological and environmental conditions.

And history seemingly repeats [itself](#). What do you make of this [timeline](#)?

The unclear role of isolation has been extensively studied. The best-known example is the 1933 study by the aptly named Drs. Paul and Freese. They showed that in the Spitsbergen Islands, colds died down at the end of the trading season and were reintroduced when sailing conditions allowed ships to berth again. The first to go

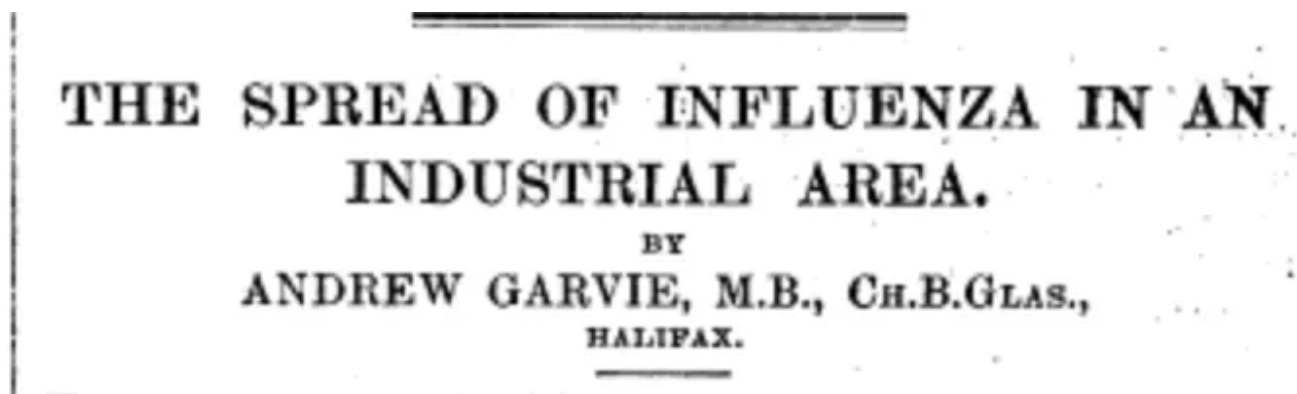
down with a cold was usually the harbour storekeeper, the fellow with the most contact with the incoming sailors.

So, the Spitzbergen narrative is wholly in keeping with germ theory and our contemporary understanding of immunity and transmission. But what about the *episodes of Eilean nan Ron*, trawler, and Antarctica?

Are influenza-like illnesses partly not infectious? Were the samples wrongly harvested? Do the records lie? Do respiratory viruses live with us and activate when the time comes? If so, how do we explain the worldwide presence of genetically identical viruses and their near synchronous appearance thousands of miles across?

So many questions and uncertainties persist. However, here is another riddle from the great Spanish Influenza of 1918-19.

In 1919, the following observations were made in the [BMJ](#) by Dr Andrew Garvie, a general practitioner in good old Halifax, England:



“But why the first case in the household was, on the average, more serious than the sporadic, and why the ‘clumping’ should occur, is difficult to understand. Casual observation might lead one to suppose that the spread was due to actual contagion from one house to another. At first I regarded it simply as due to ‘neighbourliness,’ but later on became convinced that this could only be a partial explanation of the spread. In many of the households affected in a ‘clump,’ a suggestion of being in any of the other affected houses was absolutely denied. It will further be noticed that within one particular ‘clump’ two or three houses commenced on the same date,

and further, owing to the general fear of the epidemic, spread by newspaper reports and other methods, if the epidemic was known to be present in a house, the house was usually shunned by its neighbours. In many cases the houses were not in direct contact but separated by the breadth of the street or by garden walls ... but why people within small radii of one another, of all ages, of different occupations, not coming in actual contact with one another, should develop synchronous attacks, still remains a mystery to me.”

Quite a history of events: Garvey's conclusion makes for sobering reading and excellent advice:

“I am fully aware how little importance will be attached to the views expressed by those who frame regulations, but with the experience gained in over 100 cases and with many hours spent in analysing the observations made, I cannot help but express the view that if public health authorities cannot be a help to the general practitioner, they should at least refrain from being hindrance.”

In the era of modern computing, such detailed fieldwork is dispensed with, and instead, models, retrospective database analysis and big data are the mainstay for investigations. There is no use asking overnight experts and media pundits for advice; transmission is much more complicated than it appears.

This is the sixth of the old geezers' simplified recap of what is known about ILIs.

Readings

Tyrrell, D. A. J. (David Arthur John). *Common Colds and Related Diseases*. London: Arnold, 1965. Print.

Tyrrell, D. A.J. “COMMON COLDS AND RELATED DISEASES.” *British medical bulletin* 23.2 (1967): 124–128.

Andrewes, C. H. (Christopher Howard). *The Common Cold*. London: Weidenfeld and Nicolson, 1965.

Allen TR, Bradburne AF, Stott EJ, Goodwin CS, Tyrrell DA. An outbreak of common colds at an Antarctic base after seventeen weeks of complete isolation. *J Hyg (Lond)*. 1973 Dec;71(4):657-67. doi: 10.1017/s0022172400022920.

Paul, J.H. & Freese, H. L. (1933). An epidemiological and bacteriological study of the 'common cold' in an isolated Arctic community (Spitzbergen). *American Journal of Hygiene* 17, 517.

Garvie A. The spread of influenza in an industrial area. *BMJ*1919;2:519-23.

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Nik Mar 4

Liked by Tom Jefferson

Is this series available to medical, pharmacy and dental students, or part of the induction process for health ministers and those working for the UKHSA?

If not, when it's published in a 'Flu/colds transmission for Dummies' type book shall we all chip in to buy some for the UKHSA, Streetering, Whitty bods????

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Tom Jefferson Mar 5

Author

You lot make me feel inadequate, dear Adam. I do not know the answer. COVID deaths were defined 14 different ways in 2020 and there is no definition that we can find in the registration trials.

My clinical experience tells me viral pneumonia is rare, superimposed bacterial much more common but what role exactly if any did SARS-CoV-2 play in each and everyone?

Dunno and unpicking the data maybe impossible given the censorship, gamesmanship, cash value, media circus etc etc.

Best, Tom.

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